Introduction

U.S. Census Bureau's Mission

The U.S. Census Bureau mission is to be the preeminent collector and provider of timely, relevant, and quality data about the people and economy of the United States. We will succeed by:

- **valuing our employees;**
- **innovating in our work; and**
- **responding to our customers.**

The U.S. Census Bureau's long-standing purpose has been providing official statistics depicting the people and the economy of the United States. By implementing this Operational IT Plan, we will continue to improve our IT products and services for our customers and the American public in general.

Title 13, United States Code, regulates activities pertaining to the U.S. Census Bureau's statistical programs and ensures confidentiality of data. As the nation's fact-finder, the U.S. Census Bureau:

- conducts a Decennial Census to provide for the apportionment of seats in the U.S. House of Representatives. Census counts are also used to draw Congressional and state-legislative district boundaries, for allocating federal and state funds under various grants-in-aid, for formulating public policy at all levels, and for private sector planning and decision-making;

- conducts numerous other censuses and surveys; collects and analyzes statistical data relating to the social and economic activities and characteristics of the population of the United States; disseminates these statistics to the Congress, the Executive branch, state and local governments, businesses, and the public;

- conducts special statistical studies on international trade, business services, industry, transportation, construction, and on federal, state, and local governments; issues reports, special tabulations, and monographs;

- conducts statistical research and development activities directed toward improving quality, lowering costs, and achieving more effective censuses and surveys;

- develops and maintains a geographically-referenced dictionary of all residential addresses in the United States for statistical use;

- develops and maintains a statistical directory of establishments engaged in economic activity in the United States; and

- preserves the confidentiality of this information.

The U.S. Census Bureau depends on information technology to produce statistical information and service our customers' needs. Our overall corporate vision is to foster an IT-rich environment that enhances the way we provide our products and services to our customers. We are committed to providing our customers with quality products and services at the lowest possible cost.

The Operational IT Plan provides the implementation structure to ensure that sufficient personnel, hardware, software, and communication resources are available to support long- and short-term IT program objectives.

IT Planning Documents

The U.S. Census Bureau's five-year IT plans consist of two key documents:

- the Strategic IT Plan, which addresses IT's mission, vision, goals, and strategies for achieving our objectives, capital planning and investment management processes and performance requirements, as well as high-level descriptions of IT initiatives to support the program areas' long-term objectives; and

- the Operational IT Plan (this document), published separately, which discusses specific initiatives for the current budget year in greater detail, linking them to the business processes and/or strategic goals and strategies they support.

IT Goals and Strategies

Customer service and satisfaction are the foundation of our IT goals and strategies. Our IT products and services cut across all business and programmatic functions and are essential to successful U.S. Census Bureau projects. The following section lists the IT goals and the strategies to accomplish those goals; for details about performance measures and the status of each goal, please see the approved 1999 Strategic IT Plan, pp. 16-36. You can read an electronic version of our 1999 Strategic IT Plan at: **www.census.gov/main/www/strplans.html.**

Goal 1: Increase our customers' trust by involving them in the IT processes.

Strategy 1: Develop Service Level agreements and performance metrics, and assess results of customer satisfaction relative to their expectations.

Goal 2: Provide customers with the technology to access and share information easily and seamlessly from any location.

Strategy 2: Improve the operating environment by consolidating appropriate computer processing equipment in the state-of-the-art Bowie Computer Center.

Strategy 3: Improve Local and Wide-Area Networks to make them robust, reliable, scalable, and secure to meet future needs.

Strategy 4: Standardize desktop workstations.

Goal 3: Improve our information systems' ability to support our business processes.

Strategy 5: Improve and expand electronic survey data collection, capture, and processing systems.

Strategy 6: Improve electronic information dissemination to the U.S. Census Bureau's customers.

Strategy 7: Solve the Year 2000 (Y2K) problem.

Strategy 8: Redesign legacy systems to operate in an open systems environment.
(continued)

Strategy 9:	**Support implementation of re-engineered business processes.**
Strategy 10:	**Use technology to deploy a "Digital" U.S. Census Bureau and reduce respondent burden.**
Goal 4:	**Enhance the IT skills of our employees.**
Strategy 11:	**Develop IT personnel re-sources to support the current and future technology needs of the U.S. Census Bureau.**

The 2000 Operational IT Plan update was developed in coordination with the U.S. Census Bureau program areas, and includes IT program support and initiatives for:

- **IT Directorate;**
- **Decennial;**
- **Geography;**
- **Data Access and Dissemination System (DADS);**
- **Demographic Programs;**
- **Economic Programs;**
- **Field Operations;**
- **Finance and Administration; and**
- **Methodology and Standards.**

The "Bureau-written" Operational IT Plan draft was briefed to our IT Council and to our IT Review Board for examination and comment. When those reviews were completed, the Plan and our 2001 budget submission went to our Executive Staff for final approval before submitting both to the Department of Commerce. This IT Plan development process links to our Business Plans, our Strategic IT Plan, and our 2001 budget initiatives. Most importantly, this process invites participation across the U.S. Census Bureau to ensure its acceptance, implementation, and linkage to our budget submission.

Our process for ranking and stacking U.S. Census Bureau new initiatives was integrated this year with our overall budget submission process. This was a very important step towards gathering and analyzing our baseline, with any ongoing initiatives, and with any new initiatives for FY 2001. What this integrated process has shown us is that we need to develop Business Case Analyses for the various components of the U.S. Census Bureau's infrastructure (i.e., Local Area Networks, PC support, Help Desks, etc.). These Business Case Analyses will tell us if there is a more efficient and cost effective way of doing our baseline business and, over the next couple of years, allow us to start looking at economies of scale for people and equipment. That, in turn, could provide us with the data, analysis, and results to allow us to reprogram baseline funding to new initiatives.

This year's integrated planning and budgeting processes resulted in a single new IT initiative: Census Modernization. This initiative begins the end-to-end modernization of the technology that supports our censuses and surveys; we describe this initiative in detail in Appendix A.

Information Technology (IT) Review Board Process

Last year, the U.S. Census Bureau established the IT Review Board to implement a three-phased Information Technology Capital Investment Process to address project selection, control, and evaluation. The IT Review Board operates under the authority of the Associate Director for Information Technology (also the U.S. Census Bureau's Chief Information Officer/ Senior Information Resources Management Official).

Policy and Charter

The IT Review Board provides for coordinated oversight, review, and advice to the Director, Deputy Director, Chief Financial Officer, and Principal Associate Director for Programs regarding IT projects. The IT Review Board approves or disapproves funding requests for new initiatives. It also allows, at key milestones, for continuing projects under development or requiring termination when they fail to meet performance, cost, and/or schedule criteria by ±10%. The purview of the IT Review Board applies to evaluating proposed IT investments for new systems, systems under development, and maintaining and modifying existing systems.

The IT Review Board is chaired by the Associate Director for Information Technology/U.S. Census Bureau's Chief Information Officer and is composed of:

- the Deputy Director and Chief Operating Officer;
- the Principal Associate Director and Chief Financial Officer;
- the Principal Associate Director for Programs;
- all Associate Directors;
- selected operating unit executives as designated by the Chief Operating Officer and/or the Principal Associate Directors;
- the Chief, Budget Division;
- the Chief, Acquisition Division; and
- the Chief, Security Division.

In the event that a member is unable to attend a board meeting, they may designate an alternate to take their place. The alternate must be fully authorized to represent the member; absence of a member will not delay decision-making. The IT Review Board members may invite additional participants, such as operating unit project managers, analysts, and technical specialists, to attend and advise them.

Recommendations of the IT Review Board are, to the maximum extent possible, based on consensus. The members use standard decision-making criteria for comparing and ranking IT initiatives. The process is maturing and has already made significant progress toward gathering data and performing analyses that will provide both the technical and business criteria to make sound management decisions. As Business Case Analyses are developed for our baseline activities, ongoing IT initiatives, and new IT initiatives, we can begin to evaluate our infrastructure as a whole.

Our IT Projects are evaluated in three phases:

> ### Phase I: Selection
>
> - **considers the investment portfolio (new, operational, and systems under development);**
> - **evaluates IT project proposals, analyzing risks, benefits, and costs;**
> - **prioritizes new projects based on program priorities, risks, and returns;**
> - **makes investment decisions and establishes the review cycle; and**
> - **reviews progress and performance of current development projects and operational systems as well as new projects.**
>
> ### Phase II: Control
>
> - **identifies problems, monitors projects/ systems against benefits delivered, established costs, scheduled milestones, and performance measures; and**
> - **identifies alternatives to correct deficiencies and takes appropriate action.**
>
> ### Phase III: Evaluation
>
> - **conducts post-implementation reviews of all major systems that focus on identifying the cause of discrepancies between anticipated vs. actual results in terms of cost, schedule, performance, and delivered benefits to mission improvement;**
> - **makes recommendations to continue, adjust, or consider alternatives to the operational system; and**
> - **uses lessons learned as a result of post-implementation reviews to improve the existing investment selection and control processes.**

Documentation prepared during these three phases represents the principal documentation for IT Review Board consideration. U.S. Census Bureau staff may be called upon as necessary to provide additional data and analysis.

Members meet on a schedule that complements the planning and budgeting formulation processes, with additional sessions called as required.

The IT Review Board determines the processes to be used for IT capital planning and investment, the content and format of information to be presented, and other items related to the functions of this Board, including its relationship to other groups and processes used by the U.S. Census Bureau.

Processes

The processes, procedures, and reporting requirements used by the IT Review Board are redefined as appropriate to meet the current planning and fiscal environments. For the selection phase, program managers will be required to provide information enabling the Board to make investment decisions based on the value to the U.S. Census Bureau, as determined by comparisons and tradeoffs among competing project proposals. Such information includes responses to decision-making criteria that examine expected risk-adjusted returns on investment, technical risks, improvements to program effectiveness, performance measures, effects on customers, and additional considerations required by the Raines' Rules.[*]

The IT Review Board considers systems and other investments as a portfolio for a given program area. A Technical Review Board, comprised of a variety of analysts familiar with and representing the budget, procurement, contract administration, technical architecture, system development, security,

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[*] Investments in major information systems proposed for funding in the President's budget must comply with the requirements of OMB Memorandum 97-02, also known as the "Raines' Rules."

and business areas, reviews the portfolio and makes recommendations first to the program area, then to the IT Review Board. The Technical Review Board reviews each project with regard to each of the disciplines listed above, and attempts to resolve issues with the program manager. The results are documented and forwarded to the IT Review Board for final approval or disapproval.

Although the IT Review Board has purview over all IT investments, thresholds have been defined for various levels of authority for channeling project evaluations and decisions to appropriate management levels. The availability of appropriate skills and project management disciplines are key to the success of IT projects at the selection and initiation phases. To that end, project managers received training in developing business-related outcome oriented performance measures, and managers of any significant IT project are required to take the project management training that the U.S. Census Bureau began offering last fiscal year.

The role of the IT Review Board during the control phase is to monitor projects and systems under development against established costs, scheduled milestones, performance measures, and benefits delivered. The focus is on how useful projects are, investment vs. risk issues, and specific contract management issues, as appropriate. Problems are identified, as are alternative corrective measures and appropriate actions. The IT Review Board makes the final decisions about continuing the project and will provide corrective actions as appropriate. The Technical Review Board regularly monitors ongoing system development, with

deviations from schedule, cost, etc. being reported to the IT Review Board for consideration and/or approval/disapproval for continuing the project. To assist the project monitoring function, common schedule, cost and performance measurement processes and systems are employed. These processes and systems are currently being defined and will be revised as necessary to appropriately manage and control projects.

Much of the U.S. Census Bureau's IT efforts involve modifying and enhancing existing systems. The evaluation phase will provide periodic review of the systems to ensure that further investment is appropriate. To assist in evaluating such systems, post-implementation reviews will focus on the extent to which the actual cost, schedule, performance, and delivered benefits were accurately predicted during the planning and implementation phases. Discrepancies will be addressed and the IT Review Board may decide to continue, adjust or consider alternatives to the operational system. The U.S. Census Bureau will incorporate lessons learned from the post-implementation reviews to continuously improve the investment selection and control processes.

The results of the IT reviews are documented and maintained within the Office of the Associate Director for IT/Chief Information Officer. Additionally, that office records, manages, follows up, and reports on the decisions of the IT Review Board and any action items it assigns. The purpose of the IT reviews is to ensure responsible and effective management of the significant IT resources expended by the U.S. Census Bureau.

To summarize the IT Review Board Process:

- the U.S. Census Bureau has a portfolio of projects under consideration;
- the Technical Review Board analyzes these projects and reports to the IT Review Board;
- the IT Review Board submits approved projects for inclusion in the Operational IT Plan; and
- approved projects are continually monitored to ensure they comply with budget and legislative guidelines.
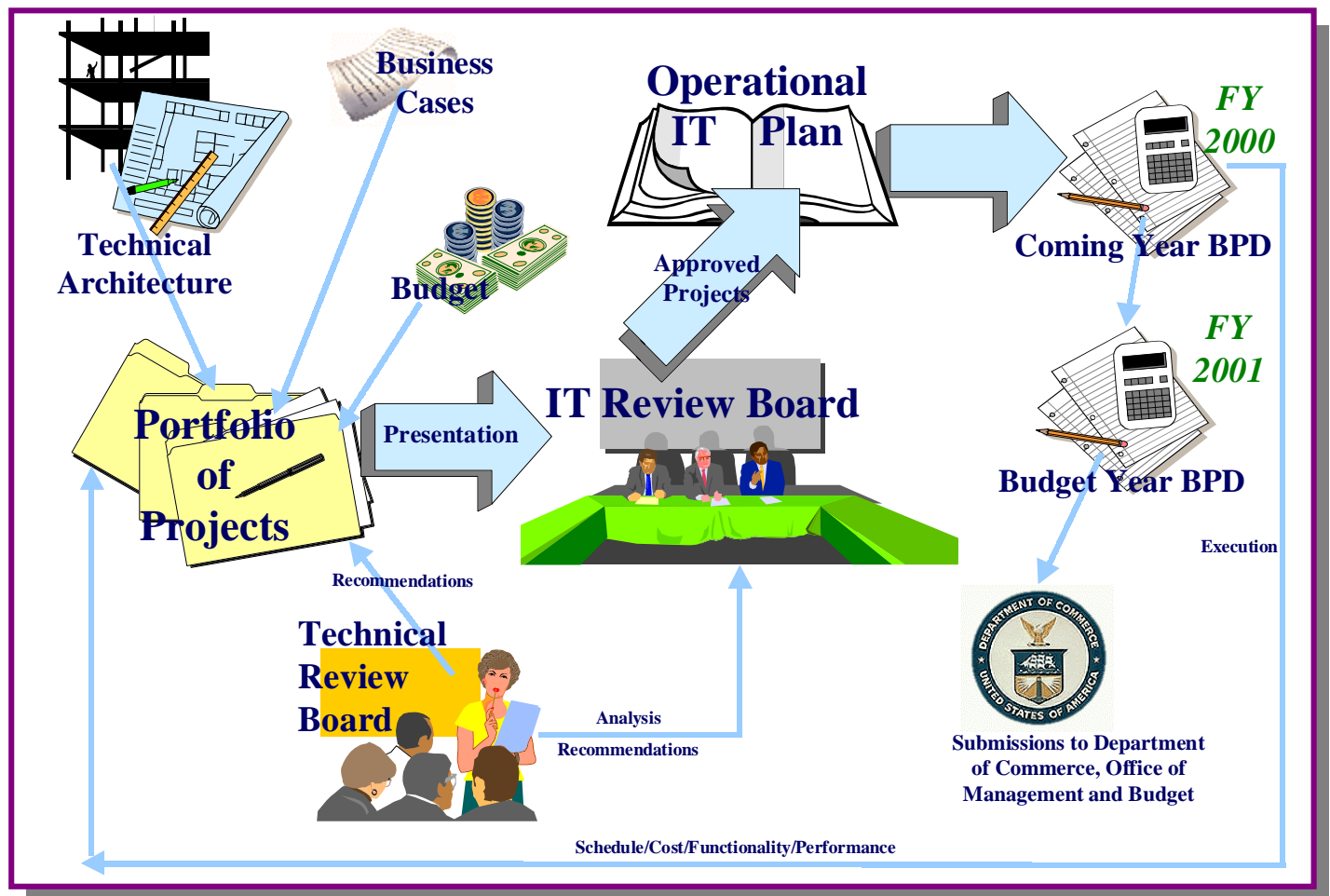
This is depicted in Figure 1, below:

Figure 1: The IT Review Board Process

Operational IT Plan Organization and Structure

The first section following this Introduction is devoted to Enterprise Information Technology (IT) Support; this section provides an overall view of IT within the U.S. Census Bureau and explains how we centrally manage it.

The remaining sections discuss the program areas and their IT plans:

- Decennial;
- Geography;
- Data Access and Dissemination System;
- Demographic;
- Economic;
- Field Operations;
- Finance and Administration; and
- Methodology and Standards.

Each program area's section is detailed as follows and as appropriate:

1.0	Program Area Overview
1.1	Products, Services, and Customers
1.2	IT Objectives
2.0	Program Area IT Support
2.1	IT System Descriptions
2.1.1	Detailed Description of System #1
2.1.2	Progress Against Planned Milestones
2.1.3	Performance Measures
2.1.4	Risks
2.1.5	References
3.0	Infrastructure Description
3.1	Detailed Description of Infrastructure
3.2	Progress Against Infrastructure Milestones
3.3	Infrastructure Performance Measures
3.4	Infrastructure Risks
3.5	Infrastructure References

In addition, the Plan includes the following appendices:

Appendix A describes a detailed budget of the current and projected IT costs for the U.S. Census Bureau. For each program area, we have provided costs of:

- hardware;
- software;
- telecommunications;
- support services and contracts;
- supplies; and
- personnel.

We have also included financial information on the Census Modernization initiative and linked this appendix to the 2001 Budget Submission. We have included more information than last year to make this appendix more useful.

Appendix B describes the Y2K status of our mission critical systems.

Appendix C describes security status of our mission critical systems.

Appendix D is a list of acronyms.

Within the narrative for each program area, we have specifically emphasized our commitment to supporting Electronic Commerce. The following section describes our overall support for and commitment to a "Digital" Department of Commerce.

Supporting a "Digital" Department of Commerce

Across the U.S. Census Bureau, we are quickly moving from paper to "digital" technology, providing customers with more choices for data access, and improving public trust in data protection and communications. The U.S. Census Bureau is positioned to demonstrate how the Department of Commerce has made tremendous strides as a recognized leader in technology. We are committed to making the entire Bureau a model of electronic commerce, and we strongly support the E-Commerce Department of the 21st Century!

Recognizing that government information is a vital national commodity, our dissemination policy is to provide Internet access to demographic, social, economic, and housing data while protecting the confidentiality of individual responses. We freely disseminate our information and encourage other organizations, both public and private, to make this information available to the general public and to specific customer markets.

The Internet is our principal means of disseminating data and data products. To encourage broad access to our information and to meet a wide range of user needs, we provide various levels of subject and geographic detail in varying formats and media, such as CD-ROM. Users have the option of purchasing data in other media, or of purchasing customized products and services.

In addition to the data dissemination function, we are making broad use of data in digital form through our computer-assisted interviewing, collection of data via the Internet, and other means. Our strategy includes:

- **re-engineering our work processes;**
- **converting paper processes to electronic;**
- **increasing public access to U.S. Census Bureau information; and**
- **reducing public reporting burdens to the U.S. Census Bureau with our census surveys.**

We will play a leadership role as the Department of Commerce defines and implements its "Digital" Department activities.

Related to providing full access to U.S. Census Bureau data is the responsibility to provide accessibility to disabled individuals. We already provide some tools needed to enable our disabled employees to gain systems access. We will ensure that new systems fully comply with the Americans with Disabilities Act for public access.

Burden Reduction Efforts and Goals

Achieving the burden reduction goals set forth in the Paperwork Reduction Act is a major challenge for the U.S. Census Bureau. We generally experience increased reporting burdens during two primary periodic collections: the constitutionally-mandated Decennial Census of Population and Housing, and the quinquennial Economic Census. We will, however, continue to work diligently to reduce the burden of its periodic and non-periodic collections.